

REMARKS

Claim 5 has been canceled.

Claim 1 has been amended.

Claims 1-4 and 6-9 are pending.

Claim Rejections

Applicant generally traverses the following rejections on the basis that Examiner has previously issued an Office Action on May 9, 2003, which rejected the original Claims 1-8 on the basis of both novelty and obviousness using Thorndon (U.S. Patent No. 4,631,971) and a combination of Thorndon and Pitassi et al (U.S. Patent No. 4,889,013). These rejections were thoroughly addressed by Applicant in a response filed September 8, 2003. By having rejected the original Claims 1-8 on the basis of thoroughly examined and validly issued patents, Examiner appears to have admitted that the utility and enablement requirements have been clearly met. Applicant asserts this position. Applicant simply amended the Claims in order to address the novelty and obviousness rejections. Applicant is perplexed how these amendments now render Applicant's claimed invention "inoperative" and one that "violates the laws of physics". Applicant requests clarification on which of the amended elements of the Claims now renders the claimed invention inoperative and in violation of the laws of physics. However, Applicant has addressed the rejections below in order to be responsive and to avoid delaying prosecution.

35 U.S.C. §112

The Office Action rejected Claims 1-4 and 6-9 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Applicant respectfully traverses the rejection. Applicant has disclosed a generator that takes an input force changes phase relationships of internal forces generated on internal gears. Nothing disclosed by Applicant possibly violates the laws of physics. In simplest terms, force is defined by $F=ma$, which means that force is defined by a mass under a constant acceleration. Rotational forces, torque is generally defined by $\tau=rF$, where r is the radius of the arm onto which a force is applied and F is the instantaneous linear force with respect to a point on the arc of rotation. It is well known that if two gears of differing radii are in engagement with one another, the torque applied by, for example, the larger gear onto the lower gear is the same (absent dissipative forces such as heat). As such, the point velocity (and typically acceleration) of smaller gear will be larger according to the laws of force conservation. Furthermore, and more importantly, the phase relationship of those gears will be very different since one is now rotating faster than the other. Applicant has presented these arguments using scalar quantities rather than a full vector analysis to simplify the arguments. Specifically, torque is actually defined as the cross product of the radius and force. However, these arguments would be identical even taking into account vector quantities. The mention of phase relationships and change in forces due to these phase changes are clearly recited in the final element of Claim 1 as amended by Applicant in the prior response. Applicant further submits that although Examiner has asserted that the invention is a “space machine”, whether or not the invention could be used as a component of a space vehicle does not violate the enablement requirement. In fact, such an assertion actually enables the invention by providing an example of how the invention could be implemented.

The Office action further rejected Claims 1-4 and 6-9 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. As described above, there are various forces throughout the device as claimed. It is well known that if a thorough force analysis is performed on a device, if there are enough directional differences within the device, that is rotations in one direction and equal rotations in the opposite direction, the net force of the device could be zero. This zero net force, does not mean that there is not movement, or forces that could be harnessed outside the device, as in Applicant's claimed invention. Once again, Applicant believes that this is a responsive argument but requests further clarification on which elements actually support an assertion that there is a zero net force output.

35 U.S.C. §101

The Office Action rejected Claims 1-4 and 6-9 under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

As described above, although in a force analysis, the net force may be zero, an output force still exists which can be manipulated to provide a drive force.

Applicant has amended the preamble of Claim 1 in order to further recite the novelty and non-obviousness of the Claims and to further breathe life into the Claims.

If Examiner has any questions regarding this document, Applicant asks that Examiner contact the undersigned immediately by telephone.

Respectfully submitted,



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